

IN THE CLAIMS:

Please cancel claims 23 – 40 without prejudice or disclaimer of the subject matter thereof and add new claims as follows.

1           --1 (Withdrawn).       A temperature sensing device for measuring temperature of a fluid  
2   at various locations along an intravenous fluid line extending between a fluid source and a  
3   patient, said device comprising:

4           a housing member selectively securable to said fluid line at any of a plurality of fluid line  
5   locations between said fluid source and said patient, wherein said housing member includes a  
6   receptacle to receive and retain a portion of said fluid line corresponding to one of said plurality  
7   of fluid line locations selected by an operator and to allow said fluid line to extend continuously  
8   through said housing member, and wherein said plurality of fluid line locations includes at least  
9   one proximal fluid line location toward said fluid source and at least one distal fluid line  
10   location toward said patient; and

11          a temperature sensor disposed proximate said receptacle to measure temperature of fluid  
12   within said retained fluid line portion and to generate a temperature signal indicating said  
13   measured fluid temperature to facilitate display of said measured fluid temperature.

1           2 (Withdrawn).       The sensing device of claim 1 further comprising:  
2           a temperature monitor in communication with said temperature sensor to receive said  
3   temperature signal and display said fluid temperature measured by said temperature sensor.

1           3 (Withdrawn).       The temperature sensing device of claim 2, wherein said

2 temperature monitor includes a hand-held display device.

1 4 (Withdrawn). The temperature sensing device of claim 1, wherein said housing  
2 member is slidable along said fluid line upon receiving and retaining said selected fluid line  
3 portion to allow fluid temperature measurements at any of said plurality of fluid line locations.

1 5 (Withdrawn). The temperature sensing device of claim 1 further comprising:  
2 a cover member connected and movable with respect to said housing member to control  
3 access to said receptacle.

1 6 (Withdrawn). The temperature sensing device of claim 1, wherein said receptacle  
2 includes a channel with a sensor receiving area that secures said temperature sensor within said  
3 housing member and a tapered section configured to releasably engage said selected fluid line  
4 portion received within said receptacle.

1 7 (Withdrawn). The temperature sensing device of claim 1 further comprising:  
2 a plurality of resilient prongs extending from said housing member and configured to  
3 receive and releasably retain said temperature sensor proximate said receptacle.

1 8 (Withdrawn). The temperature sensing device of claim 7, wherein each of said  
2 prongs includes a transversely extending projection, each projection extending a selected  
3 distance toward the other projection to engage and releasably retain said temperature sensor  
4 between said prongs.

1           9 (Withdrawn).       The temperature sensing device of claim 1, wherein said housing  
2 member further includes a platform including an engaging surface to engage a body part of said  
3 patient.

1           10 (Withdrawn).     The temperature sensing device of claim 1, wherein said  
2 temperature sensor includes a sensing tip disposed within said receptacle to pierce a wall of said  
3 selected fluid line portion and directly measure temperature of fluid flowing through that portion.

1           11 (Withdrawn).     The temperature sensing device of claim 10, wherein said housing  
2 member further includes an upper member pivotally connected to a lower member, each of said  
3 upper and lower members includes a groove disposed on an engaging surface, and said grooves  
4 of said upper and lower members are aligned on said engaging surfaces to form said receptacle in  
5 the form of a channel upon contact between said engaging surfaces.

1           12 (Withdrawn).     The temperature sensing device of claim 11, wherein said engaging  
2 surfaces include a locking mechanism to lock said upper member against said lower member.

1           13 (Withdrawn).     The temperature sensing device of claim 1, wherein said housing  
2 member includes a resilient member arranged in a spiral configuration with first and second  
3 resilient member ends overlapping each other and separated by a gap.

1           14 (Original). A temperature sensing device for measuring temperature of a fluid flowing

2 within an intravenous fluid line at selected locations along said fluid line, said device  
3 comprising:

4 a fitting including:

5 first and second open ends each securable to selected portions of said fluid line;

6 a passage disposed within said fitting and extending between said first and second open  
7 ends to permit fluid flowing within said fluid line to flow through said fitting; and

8 a connection port disposed on an exterior surface of said fitting and in fluid  
9 communication with said passage; and

10 a temperature sensor disposed within said connection port to measure temperature  
11 of fluid flowing through said fitting and to generate a temperature signal indicating said  
12 measured fluid temperature to facilitate electronic display of said measured fluid temperature.

1 15 (Original). The sensing device of claim 14 further comprising:

2 a temperature monitor in communication with said temperature sensor to receive said  
3 temperature signal and electronically display said fluid temperature measured by said  
4 temperature sensor.

1 16 (Original). The temperature sensing device of claim 15, wherein said temperature  
2 monitor includes a hand-held display device.

1 17 (Withdrawn). The temperature sensing device of claim 14, wherein said  
2 temperature sensor directly contacts fluid flowing within said passage.

1           18 (Original). The temperature sensing device of claim 14 further comprising:

2           a receptacle disposed within said connection port to directly contact fluid flowing within  
3       said passage, wherein said temperature sensor is removably received within and contacts said  
4       receptacle.

1           19 (Original). The temperature sensing device of claim 18, wherein said connection port  
2       extends from an outer surface of said fitting and said device further comprises:

3           a securing member to secure said temperature sensor to said connection port, wherein  
4       said securing member includes a recess defined therein and said temperature sensor is disposed  
5       within said recess and extends to contact said receptacle when said securing member is secured  
6       to said connection port.

1           20 (Withdrawn).       The temperature sensing device of claim 19, wherein said securing  
2       member and said connection port include a locking mechanism to releasably secure said securing  
3       member to said connection port and to facilitate contact between said temperature sensor and  
4       said receptacle.

1           21 (Withdrawn).       The temperature sensing device of claim 20, wherein said locking  
2       mechanism includes:

3           at least one projection removably attached to an outer surface of said connection port; and  
4           at least one engagement member disposed on said securing member to engage a  
5       corresponding projection;

6           wherein said at least one engagement member is configured to remove said

7 corresponding projection from said connection port in response to disengagement of said  
8 securing member with said connection port to thereby prevent re-engagement of said connection  
9 port with said securing member and re-use of said fitting.

1 22 (Withdrawn). The temperature sensing device of claim 14, wherein said  
2 connection port includes a flexible membrane to seal an opening in said connection port from  
3 said passage, and said temperature sensor includes a sensing tip configured to penetrate said  
4 flexible membrane and directly measure temperature of fluid flowing within said passage.

1 23 - 40 (Canceled).

1 41 (Withdrawn). A temperature sensing device for measuring temperature of a fluid  
2 at various locations along an intravenous fluid line extending between a fluid source and a  
3 patient, said device comprising:

4 housing means for engaging said fluid line and selectively securable to said fluid line at  
5 any of a plurality of fluid line locations between said fluid source and said patient, wherein said  
6 housing means includes receiving means for receiving and retaining a portion of said fluid line  
7 corresponding to one of said plurality of fluid line locations selected by an operator and for  
8 allowing said fluid line to extend continuously through said housing means, and wherein said  
9 plurality of fluid line locations includes at least one proximal fluid line location toward said fluid  
10 source and at least one distal fluid line location toward said patient; and

11 temperature sensing means disposed proximate said receiving means for measuring  
12 temperature of fluid within said retained fluid line portion and generating a temperature signal

13 indicating said measured fluid temperature to facilitate display of said measured fluid  
14 temperature.

1 42 (Withdrawn). The temperature sensing device of claim 41 further comprising:  
2 display means in communication with said temperature sensing means for receiving said  
3 temperature signal and displaying said fluid temperature measured by said temperature sensing  
4 means.

1 43 (Withdrawn). The temperature sensing device of claim 41, wherein said housing  
2 means is slidable along said fluid line upon receiving and retaining said selected fluid line  
3 portion to allow fluid temperature measurements at any of said plurality of fluid line locations.

1 44 (Withdrawn). The temperature sensing device of claim 41 further comprising:  
2 cover means connected and movable with respect to said housing means for controlling  
3 access to said receiving means.

1 45 (Withdrawn). The temperature sensing device of claim 41, wherein said device  
2 further comprises:  
3 resilient means extending from said housing means for receiving and releasably retaining  
4 said temperature sensing means proximate said receiving means.

1 46 (Withdrawn). The temperature sensing device of claim 41, wherein said housing  
2 means further includes patient means for engaging a body part of said patient.

1           47 (Withdrawn).       The temperature sensing device of claim 41, wherein said  
2   temperature sensing means includes line sensing means disposed within said receiving means for  
3   piercing a wall of said selected fluid line portion and directly measuring temperature of fluid  
4   flowing through that portion.

1           48 (Withdrawn).       The temperature sensing device of claim 47, wherein said housing  
2   means further includes an upper member pivotally connected to a lower member, each of said  
3   upper and lower members includes a groove disposed on an engaging surface, and said grooves  
4   of said upper and lower members are aligned on said engaging surfaces to form said receiving  
5   means in the form of a channel upon contact between said engaging surfaces.

1           49 (Withdrawn).       The temperature sensing device of claim 48, wherein said engaging  
2   surfaces include locking means for locking said upper member against said lower member.

1           50 (Withdrawn).       The temperature sensing device of claim 41, wherein said housing  
2   means includes a resilient member arranged in a spiral configuration with first and second  
3   resilient member ends overlapping each other and separated by a gap.

1           51 (Original). A temperature sensing device for measuring temperature of a fluid flowing  
2   within an intravenous fluid line at selected locations along said fluid line, said device  
3   comprising:

4           connector means for permitting fluid flow therethrough, said connector means including:

5                   first and second open ends each securable to selected portions of said fluid line;



6 flow means disposed within said connector means and extending between said first and  
7 second open ends for permitting fluid flowing within said fluid line to flow through said  
8 connector means; and

9 fluid access means disposed on an exterior surface of said connector means and in  
10 fluid communication with said flow means; and

11 temperature sensing means disposed within said fluid access means for measuring  
12 temperature of fluid flowing through said connector means and for generating a temperature  
13 signal indicating said measured fluid temperature to facilitate electronic display of said measured  
14 fluid temperature.

1 52 (Original). The temperature sensing device of claim 51 further comprising:

2 display means in communication with said temperature sensing means for receiving said  
3 temperature signal and electronically displaying said fluid temperature measured by said  
4 temperature sensing means.

1 53 (Withdrawn). The temperature sensing device of claim 51, wherein said

2 temperature sensing means directly contacts fluid flowing within said flow means.

1 54 (Original). The temperature sensing device of claim 51 further comprising:

2 cover means disposed within said fluid access means to directly contact fluid flowing  
3 within said flow means, wherein said temperature sensing means is removably received within  
4 and contacts said cover means.

1           55 (Original). The temperature sensing device of claim 54, wherein said fluid access  
2 means extends from an outer surface of said connector means and said device further comprises:  
3           securing means for securing said temperature sensing means to said fluid access means,  
4 wherein said securing means includes a recess defined therein and said temperature sensing  
5 means is disposed within said recess and extends to contact said cover means when said securing  
6 means is secured to said fluid access means.

1           56 (Withdrawn).       The temperature sensing device of claim 55, wherein said securing  
2 means and said fluid access means include locking means for releasably securing said securing  
3 means to said fluid access means and for facilitating contact between said temperature sensing  
4 means and said cover means.

1           57 (Withdrawn).       The temperature sensing device of claim 56, wherein said locking  
2 means includes:  
3           projection means removably attached to an outer surface of said fluid access means for  
4 securing said securing means to said fluid access means; and  
5           engagement means disposed on said securing means for engaging a corresponding  
6 projection means for securing said securing means to said fluid access means;  
7           wherein said engagement means removes said corresponding projection from said fluid  
8 access means in response to disengagement of said securing means with said fluid access means  
9 to thereby prevent re-engagement of said fluid access means with said securing means and re-use  
10 of said connector means.

1           58 (Withdrawn).       The temperature sensing device of claim 51, wherein said fluid  
2   access means includes barrier means for sealing an opening in said fluid access means from said  
3   flow means, and said temperature sensing means includes penetrating sensing means for  
4   penetrating said barrier means and directly measuring temperature of fluid flowing within said  
5   flow means.

1           59 (New).       The temperature sensing device of claim 14 further comprising:  
2           a temperature monitor in communication with said temperature sensor to receive said  
3   temperature signal and print said measured fluid temperature.

1           60 (New).       The temperature sensing device of claim 14 further comprising:  
2           a temperature monitor in communication with said temperature sensor to receive said  
3   temperature signal and record measured temperatures of said fluid.

1           61 (New).       The temperature sensing device of claim 60, wherein said temperature  
2   monitor includes a printer to print said recorded measured fluid temperatures.

1           62 (New).       The temperature sensing device of claim 51 further comprising:  
2           temperature printing means in communication with said temperature sensing means for  
3   receiving said temperature signal and printing said measured fluid temperature.

1           63 (New).       The temperature sensing device of claim 51 further comprising:

2            temperature monitoring means in communication with said temperature sensing means  
3   for receiving said temperature signal and recording measured temperatures of said fluid.

1            64 (New).    The temperature sensing device of claim 63, wherein said temperature  
2   monitoring means includes printing means for printing said recorded measured fluid  
3   temperatures.--